

Amendments to the Claims:

Following is a complete listing of the claims pending in the application, as amended:

1-25. (Cancelled)

26. (Currently Amended) ~~The method of claim 18, further comprising~~ A method of depositing material onto a microfeature workpiece in a reaction chamber, the method comprising:

flowing a first pulse of a first gas through a first gas conduit, a first valve, and a second gas conduit and into the reaction chamber, wherein the second gas conduit is downstream from the first valve;

flowing a second pulse of the first gas through the first gas conduit, a second valve, and the second gas conduit and into the reaction chamber without flowing the second pulse of the first gas through the first valve; and

flowing a third pulse of the first gas through the first gas conduit and a third valve into the reaction chamber.

27-34. (Canceled)

35. (Currently Amended) ~~The method of claim 33, further comprising~~ A method of depositing material onto a microfeature workpiece in a reaction chamber, the method comprising:

controlling a first valve to provide a first pulse of a first gas to the reaction chamber through a first gas line and a second gas line independent of a second valve, wherein the second gas line is downstream from the first valve;

controlling the second valve to provide a second pulse of the first gas to the reaction chamber through the first gas line and the second gas line independent of the first valve;

flowing a third pulse of the first gas through a third gas passageway in the valve assembly; and

flowing a fourth pulse of the first gas through a fourth gas passageway in the valve assembly, wherein the third and fourth gas passageways are configured in a parallel arrangement with the first and second gas passageways and are in fluid communication with the first gas conduit.

36. (Original) A method for depositing material onto a microfeature workpiece in a reaction chamber, the method comprising:

opening a first valve to dispense a first pulse of a first gas into the reaction chamber through a first downstream main line;

closing the first valve;

opening a second valve to dispense a second pulse of the first gas into the reaction chamber through the first downstream main line; and

closing the second valve, wherein the first pulse of the first gas does not pass through the second valve and the second pulse of the first gas does not pass through the first valve.

37. (Original) The method of claim 36, further comprising:

opening a third valve to dispense a first pulse of a second gas into the reaction chamber through a second downstream main line;

closing the third valve;

opening a fourth valve to dispense a second pulse of the second gas into the reaction chamber through the second downstream main line; and

closing the fourth valve, wherein the first pulse of the second gas does not pass through the fourth valve and the second pulse of the second gas does not pass through the third valve.

38. (Original) The method of claim 36 wherein closing the first valve occurs before opening the second valve.

RESPONSE UNDER 37 C.F.R. § 1.116

EXPEDITED PROCEDURE – Art Unit 1762

Attorney Docket No. 108298722US

Disclosure No. 02-1565.00/US

39. (Original) The method of claim 36, further comprising:
opening a third valve to dispense a third pulse of the first gas into the reaction chamber
through the first downstream main line after closing the second valve; and
closing the third valve.
40. (Canceled)